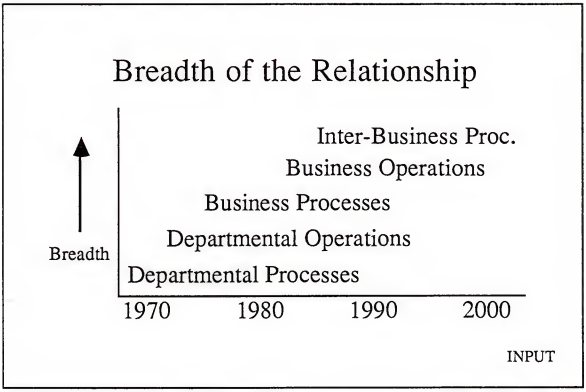
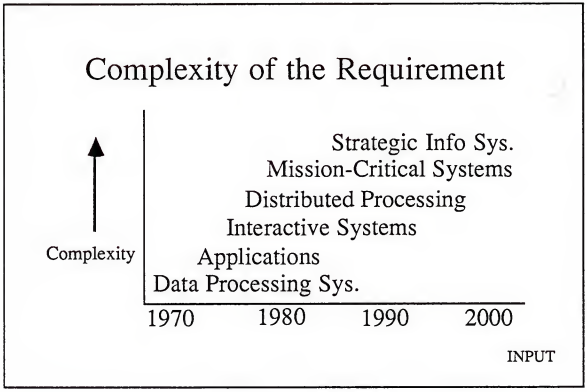
Information Systems Management Challenges for the 1990s

INPUT



NOTES:

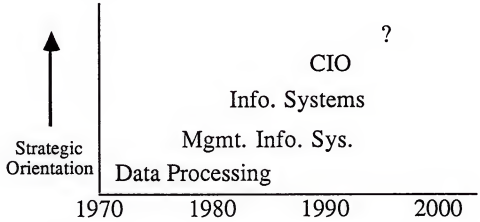
JJ88-DT1-4



NOTES:

JJ88-DT1-5

Orientation of the Responsibility



INPUT

NOTES:

JJ88-DT1-7

Information Systems—Driving Forces

- Bottom-Line Return
- Rapid Response and Development
- Expanding Wealth of Technology
- International Competition
- Unstable Organizational Environment

INPUT

NOTES:

JJ88-DT1-8

Information Systems—Major Issues

- Rising Management Expectations
- User Demands for Increasingly Complex Solutions
- Managing the Technology Investment
- Integration of Data/Technology/ Applications
- Delivery of Mission-Critical Systems

INPUT

NOTES:

JJ88-DT1-9

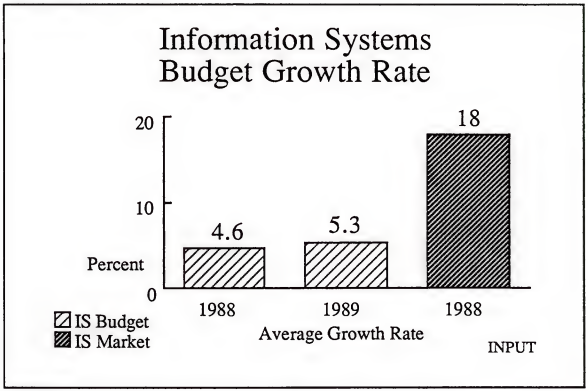
Information Systems—Blocking Factors

- Infrastructure Gridlock
- Lack of Qualified Personnel
- Existing Applications Portfolio
- Organizational Response Time

INPUT

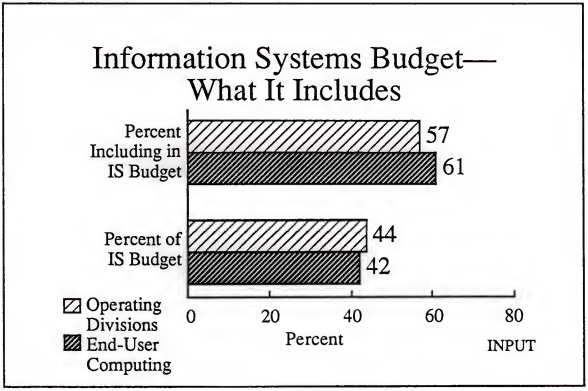
NOTES:

JJ88-DT1-10



NOTES:

JJ88-DT2-26



NOTES:

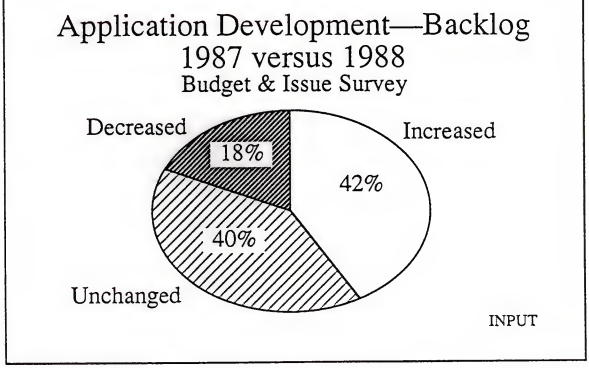
JJ88-DT2-24

Application Development Trends

INPUT

NOTES:

UANR-DT2-10



NOTES:

JJ88-DT2-11

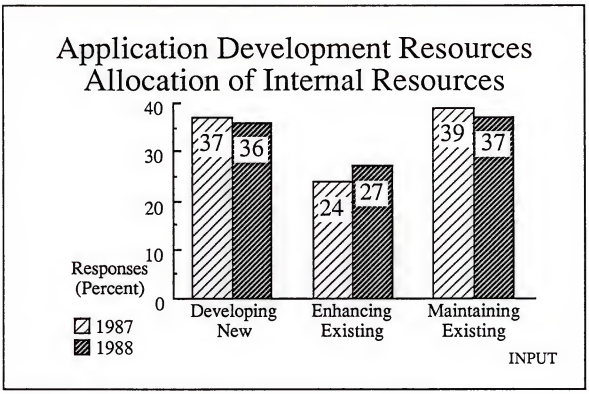
Application Development—Key Issues

Issue	Resp.
Productivity & Quality	38
Use of Technology	16
Responsiveness	14
Development Process	11

INPUT

NOTES:

JJ88-DT2-12a



NOTES:

JJ88-DT2-13

Sources of Development Resources—New Projects

(Percent)

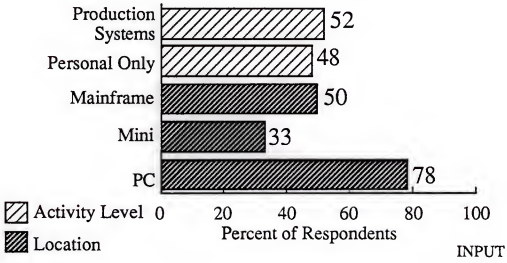
Source Resources	Packaged Software	Custom Develop.	TOTAL
Internal	22	78	56
Internal & External	52	48	44
TOTAL	35	65	100

INPUT

NOTES:

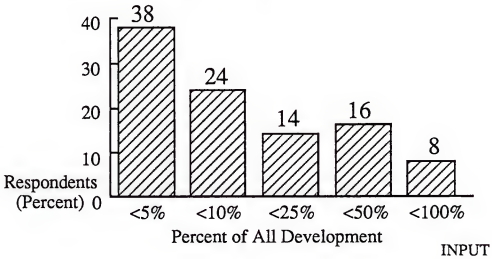
JJ88-DT2-15

Development by the End User



NOTES:

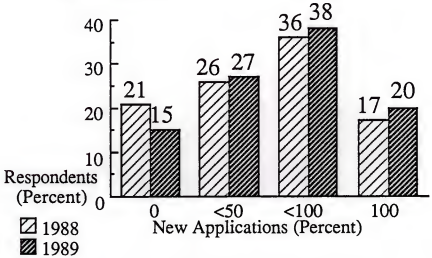
JJ88-DT2-16



NOTES:

JJ88-DT2-17

Relational DBMS Application Magnitude of Mainframe Use



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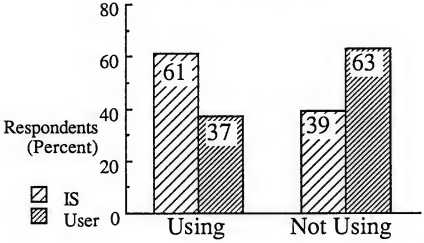
NOTES:

JJ88-DT2-18

Relational DBMS Application
Who Is Using It?



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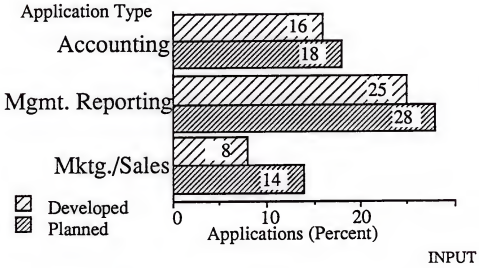
NOTES:

USM2-DT2-20

Relational DBMS Application How Is It Being Used?



NOTES:

USM2-DT2-23

Applications Development Summary

- Backlog Will Never Go Away
- External Resources Becoming More Common

INPUT

NOTES:

JJ88-DT2-21a

Applications Development Summary

- End User Becoming a Force and Alternative
- Relational DBMS Use in Full Bloom
- Data Management Will Have to Change

INPUT

NOTES:

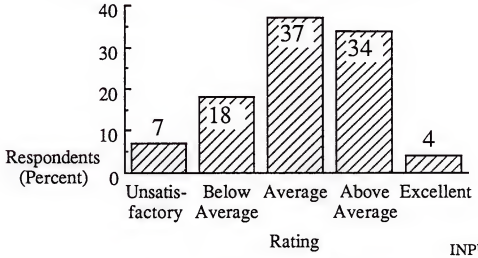
JJ88-DT2-21b

Data Management Trends

INPUT

NOTES:

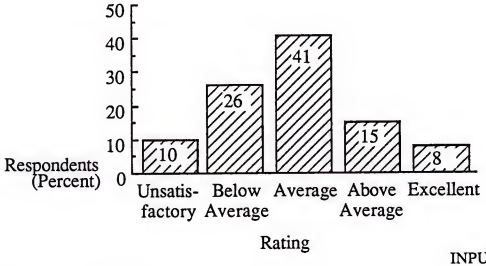
UANR-DT-1



NOTES:

JJ88-DT2-19

Effectiveness of Data Dictionaries



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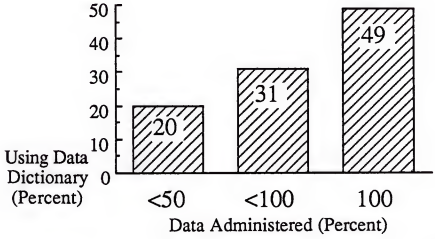
NOTES:

USM2-DT2-11

Use of Data Dictionaries
Data Administered



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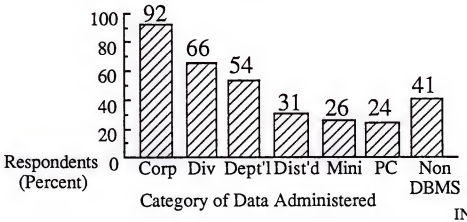
NOTES:

USM2-DT2-12

Data Administration
Breadth of Responsibility

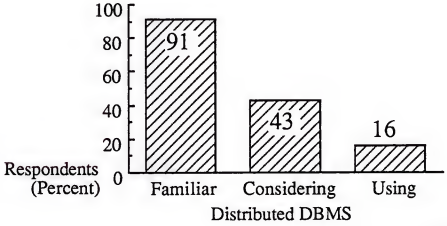


INPUT

NOTES:

JJ88-DT2-20

Distributed DBMS Application
What Is the Activity Level?



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NOTES:

USM2-DT2-28

Data Management
Current Trends & Challenges
Conclusions

- The Role Is Changing
- New DBMS Technology Is Being Used
- The End User Is Developing with RDBMS
- IS Management Needs to Increase Emphasis

INPUT

NOTES:

USM2-DT2-32

Impacts of New Technology

Driving Force:
Expanding Wealth of Technology

Major Issue:
Managing the Technology Investment

INPUT

NOTES:

JJ88-DT2-35

Planned New Technologies

Category	Responses (Percent)
Voice, Image and Optical Storage and Retrieval	21
LANs & Dist'd Processing	13
Networking Connectivity	12
Intelligent Workstations	11
CASE & Application Development	10

INPUT

NOTES:

JJ88-DT2-36

Planned New Technologies

Category	Responses (Percent)
Application Solutions	9
AI and Expert Systems	8
DBMS	8
Electronic Data Interchange	4
Office Systems	3

INPUT

NOTES:

JJ88-DT2-37

Target for Information Systems Management 1990s

- Organization
- Network Environment
- Development Environment
- Responsibility Shift to User

INPUT

NOTES:

JJ88-DT1-11

Federated IS Organization

Corporate IS	Unit IS
• Competition • Partnerships • Standards • Corporate Systems • Corporate Policies	• Customers • Business Support • Operating Systems • Policy

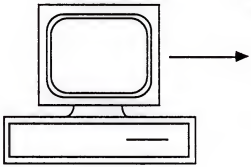
INPUT

NOTES:

JJ88-DT1-12

Network Environment

Intelligent Workstation = Window to Information Services



- Local
- Distributed
- Central
- External

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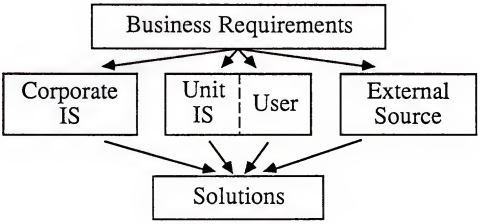
NOTES:

JJ88-DT1-13

Development Environment



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NOTES:

JJ88-DT1-14

Responsibility Shift to User

- Manage Tier-Two & -Three Processing
- Do Significant Portion of Application Development
- Manage Tier-Two & -Three Data Bases
- Control Tactical IS Decisions
- Self Satisfy Information Appetite

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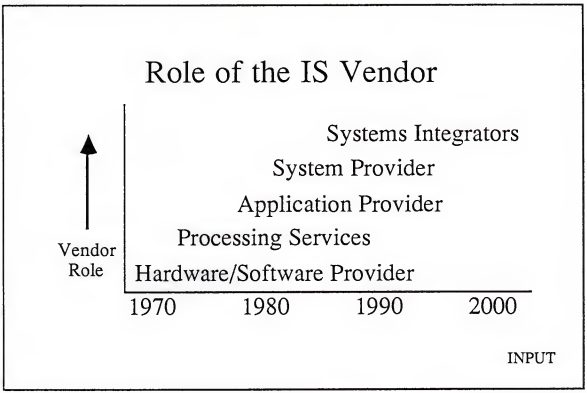
NOTES:

JJ88-DT1-15



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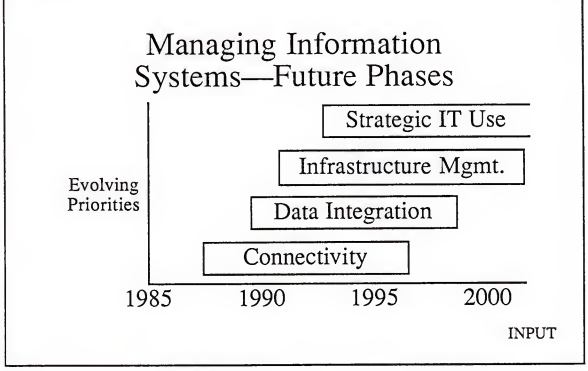
JJ88-DT1-6



NOTES:

JJ88-DT1-16

Information Systems Emphasis

- Think Like an Operating Unit
- Flexibility in Use of Outside Resources
- Solutions Not Applications
- Keep an Eye on Competition
- Test the Link: IS Strategy to Business Strategy

INPUT

NOTES:

JJ88-DT2-9

Information Systems Priorities—1989

- Audit the Data Management Function
- Review IS Budget Control Policies
- Review Use of External Products and Services

INPUT

NOTES:

JJ88-DT2-39a

Information Systems Priorities—1989

- Prepare End-User Support for the Next Wave
- Experiment with Connectivity
- Assign Responsibility for Standards

INPUT

NOTES:

JJ88-DT2-39b

Information Systems Priorities—Beyond 1989

- Clear Expectations of IS
- Identify Mission Critical Processes
- Application Development—Use All Alternatives

INPUT

NOTES:

JJ88-DT2-40a

Information Systems Priorities—Beyond 1989

- Data Management—Company-Wide Orientation
- Technology Architecture—Network Management
- Central IS—Consulting Role

INPUT

NOTES:

JJ88-DT2-40b

Corporate Information Systems Organization Style

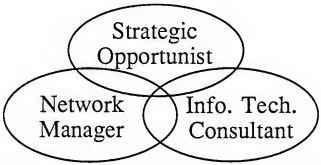
- Smaller
- Expert Based—Technology and Business
- Consulting Style—Information Engineers and Solution Builders
- Marketeers for Technology

INPUT

NOTES:

JJ88-DT1-18

Information Systems Executive



An Internal "Systems Integrator"

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NOTES:

JJ88-DT1-19

Information Systems Management Challenges for the 1990s

INPUT

Application Development Trends

INPUT

NOTES:

UANR-DT2-10

Data Management Trends

INPUT

NOTES:

UANR-DT-1

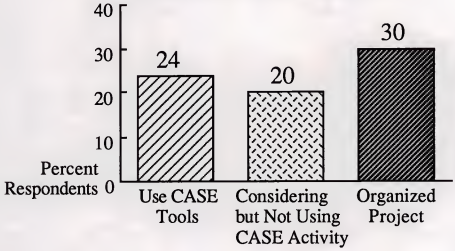
CASE
(Computer-Aided Systems Engineering)

Market and Opportunity

INPUT

NOTES:

UANP-DT4-1



NOTES:

UANP-DT4-14

Vendor Alliances
Professional Services-
Front End

Arthur Young	KnowledgeWare
Coopers & Lybrand	NASTEC
Deloitte Haskins & Sells	Holland Systems/ Index Technology

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NOTES:

UANP-DT4-29

Electronic Data Interchange (EDI)

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